

# Evaluating the Value of Healthcare Information Technology: Finding the Diamond in the Rough, and Tumble

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The value of healthcare information technology has never been more important. Identified as a key component of healthcare transformation to reduce costs and improve quality, deriving maximal value from considerable healthcare information technology investment in both the local office or hospital setting, as well as the national or societal context, remains difficult(1;2).

Despite continued pressure from both the public and private payer community, and increasing evidence on the value of information technology albeit from isolated settings, adoption of healthcare information technology proceeds at a snail's pace. Studies performed at the Center for Information Technology Leadership suggest that significant potential exists for healthcare savings exists at the national and local level with adoption of several forms of healthcare information technology. These studies, however, examined information technology from particular technology vantage points, for example, ambulatory CPOE, or information exchange and interoperability.

In this presentation, and overview of three studies from the Center for Information Technology Leadership – the Value of CPOE in Ambulatory Care Settings(3), the Value of Healthcare Information Exchange and Interoperability(4), and the Value of Information Technology in Chronic Disease Management(5) – will be provided and correlations and contrasts will be presented from the three studies.

Specifically, four new perspectives on this work will be presented:

1. Key contributors to the value of healthcare information technology that underly all three analyses will be identified and described.
2. Key detractors from the value of healthcare information technology that underlie all three analyses will be

identified and described, including barriers to obtaining maximum value potential for all three technologies.

3. Implications for healthcare information technology strategy at both the local clinic and hospital, and national level will be discussed.
4. Implications for the pricing strategy of healthcare information technology vendors will be discussed

## Reference List

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- (3) Johnston D, Pan E, Walker J, Bates DW, Middleton B. The Value of Computerized Order Entry in Ambulatory Settings. Boston: Center for Information Technology Leadership; 2003.
- (4) Walker J, Pan E, Johnston D, dler-Milstein J, Bates DW, Middleton B. The Value Of Health Care Information Exchange and Interoperability. Health Aff (Millwood ) 2005 Jan 19.
- (5) Bu D, Pan E, Walker J *et al.* The Value of Information Technology in Chronic Disease Management. 2006.

Acknowledgements: this presentation is make possible by the work and collaboration of all members of the CITL, and grant support from the RWJF, CHCF, and generous unrestricted corporate supporters listed at [www.citl.org](http://www.citl.org).

## Middleton BioSketch

Blackford Middleton is Corporate Director of Clinical Informatics Research & Development, and Chairman of the Center for Information Technology Leadership at Partners Healthcare System, and Assistant Professor of Medicine at Brigham and Women's Hospital, Harvard Medical School, and of Health Policy and Management at the Harvard School of Public Health.

Dr. Middleton studied Molecular Biology and Biochemistry at the University of Colorado, Boulder. He received a Masters in Public Health degree from the Yale University School of Medicine with a dual concentration in Epidemiology, and Health Services Administration. He received an MD from the State University of New York School of Medicine at Buffalo, and was trained in internal medicine at the University of Connecticut Health Sciences Center. His Fellowship in General Internal Medicine was at Stanford University, where he received a Master of Science degree in Health Services Research, focusing on medical informatics.

Dr. Middleton serves on the Boards of Directors of the Healthcare Information Management & Systems Society (HIMSS) where he is Chairman 2005-6, American College of Medical Informatics where he is Treasurer 2005-6, HealthAlliant, Inc., and MassPRO. Dr. Middleton is a Fellow of the American College of Physicians, the American College of Medical Informatics, and HIMSS.